REMARKS

The Examiner is respectfully requested to enter the foregoing amendment prior to an examination of the above-identified patent application.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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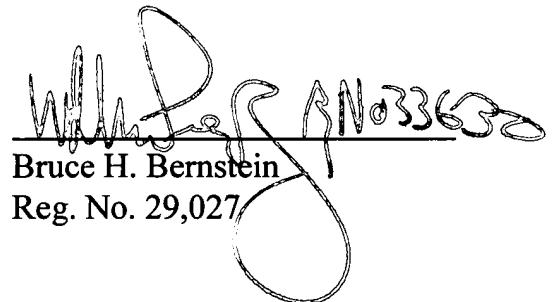
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MARKED-UP COPY OF CLAIMS

1. (Amended)   An IP connection communication system for establishing communication between each of <u>a plurality of</u> IP connection terminals[3A - 3D], in which an IP connection terminal [(3A - 3D)]is assigned with a global IP address [(G)] by a provider [(5A - 5D)]on every connection to an internet [(2)]as a receiving terminal, the system comprising[;]<u>:</u>

a user registration [means (M_3) for registration <u>of] system that registers</u> machine authentication data [(N_A - N_D)]inherent to the IP connection [terminals (3A - 3D)]<u>terminal</u> owned by a user and a calling code [(Y_A - Y_D) <u>correspondingly] corresponding</u> to a directory service server [(4)]connected to the internet[(2)],

a waiting registration request [means (M_1) for sending]<u>system that sends</u> a waiting request packet [Pw] comprising a machine authentication data [(N_A - N_D)] and a global IP address [(G_A - G_D)] assigned by the [provided (5A - 5D)]<u>provider</u> from the IP connection terminal [(3A - 3D)]to the directory service server [(4)]when the IP connection terminal [(3A - 3D)]as the receiving terminal is connected to the internet,

a waiting registration [means (M_4) for reading]<u>system that reads</u> out the machine authentication data [(N_A - N_D)]and the global IP address [(G_A - G_D)]from the packet [(Pw)] when the directory server receives the waiting request packet [(Pw)]from the IP connection terminal [(3A - 3D)]and registering the global IP address [(G_A - G_D)]as the current

connection address in a predetermined memory area corresponding to the machine

authentication data [(N_A - N_D)]and the calling code [(Y_A - Y_D)]thereof,

a destination address request [means (M_2) for sending]system that sends a sending

request packet [(Ps)]demanding [for] the notification of a global IP address [(G_B)

]corresponding to the calling code [(Y_B)]of the receiving IP connection terminal[(3B)],

an IP address notification [means (M_5) for sending]system that sends back the global

IP address [(G_B)]corresponding to the calling code [(Y_B)]of the receiving IP connection

terminal [(3B)]recorded in the request packet [Ps]to the sending IP connection terminal[

(3A)] when the directory service server receives the sending request packet [Ps]from the IP

connection terminal, and

a connection request [means (M_2) for sending]system that sends the connection

request packet to the global IP address [(G_B)]from the sending IP connection terminal [(3A)

]in accordance with TCP/IP when a global IP address [(G_B)]corresponding to the calling

code [(Y_B)]on the receiving side is sent back.

2.   (Amended)   An IP connection communication system for establishing

communication between each of a plurality of IP connection terminals [3A - 3D], in which

an IP connection terminal [(3A - 3D)] is assigned with a global IP address [(G)]by a provider

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[(5A - 5D)] on every connection to an internet [(2)] as a receiving terminal, the system comprising[;]:

a user registration [means (M₂) for registration of]system that registers machine authentication data [(N$_A$ - N$_D$)] inherent to the IP connection terminal [(3A - 3D)]owned by a user and a calling code [(Y$_A$ - Y$_D$)] correspondingly to a directory service server [(4)]connected to the internet[(2)],

a waiting registration [means (M₄) for reading]system that reads the machine authentication data [(N$_A$ - N$_D$)] and the global IP address [(G$_A$ - G$_D$)] from a waiting request packet [Pw] upon receiving a waiting request packet [(Pw)]comprising the machine authentication data [(N$_A$ - N$_D$)]and the global data assigned by the provider from the receiving IP connection terminal [(3A - 3D)], and registering the global IP address [(G$_A$ -G$_D$)] as the current connection address in a predetermined memory area corresponding to the machine authentication data [(N$_A$ - N$_D$)]and the calling code [(Y$_A$ - Y$_D$)]thereof, and

an IP address notification [means (M₅) for sending]system that sends back the global IP address [(G$_B$)]corresponding to the calling code [(Y$_B$)]of the receiving IP connection terminal [(3B)] recorded in the packet [Ps] to the sending IP connection terminal [(3A)]when the directory service server [(4)]receives the sending request packet [Ps]from the IP connection terminal[(3A)].

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3. (Twice Amended) An IP connection communication system as defined in claim 1, wherein a third layer data of the waiting request packet [(Pw)]and the sending request packet [(Ps)]contains a customer identification data [KID]for specifying a user and a machine identification data [MID]for specifying the IP connection terminal [(3A-3D)] thereof as the machine authentication data [NA - ND], and

the waiting registration [means (M4)]system and the IP address notification [means (M5)]system of the directory service server [(4)]are executed when the machine authentication data [(NA - ND)]agrees with a previously registered user's machine authentication data [(NA - ND)].

4. (Amended) An IP connection communication system as defined in claim 3, wherein

a LAN card [(7)]connected in a wireless fashion with each of wireless LAN access oints [6A to 6D] connected to the internet is attached to each IP connection terminal [(3A-3D)]and

[an MAC]a message access control address [(DM)]encrypted under a predetermined rule or the [MAC]message access control address [(DM)]per se of the LAN card [(7)]is contained in the machine identification data[(MID)].

5. (Amended) An IP connection terminal for establishing communication with [other] another IP connection terminal [(3B - 3D)]assigned with a global IP address [(G$_B$ - G$_D$)]by a provider[(5B - 5D)]on every connection to an internet [(2)]in accordance with TCP/IP, the terminal comprising[;]:

a waiting registration request [means (M$_1$) for sending]system that sends a waiting request packet [(Pw)]comprising [the]authentication data [(N$_A$)]and [the]a global IP address [(G$_A$)]assigned by the provider [(5A)]to a directory service server [(4)]in which the calling code [(Y$_A$)]corresponding to the machine authentication data [(N$_A$)]are previously stored and demanding [for] registration of the global IP address [(G$_A$)]corresponding to the machine authentication data [(N$_A$)]and the calling data [(Y$_A$)]as the current connection address and

a calling [means (M$_2$) for calling]system that calls [other] another IP connection terminal [(3B - 3D)]in which the calling [means (M$_2$)]system comprises[;]:

a calling code input [means (M$_{21}$) for inputting]system that inputs a calling code [(Y$_B$ - Y$_D$)]of the other IP connection terminal[(3B - 3D)],

a destination address request [means (M$_{22}$) for sending]system that sends a sending request packet [(Ps)]demanding [for the] notification of the global IP address [(G$_B$ - G$_D$)]corresponding to the calling code [(Y$_B$ - Y$_D$)]inputted by the calling code input [means (M$_{21}$)]system to the directory service server[(4)],

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a connection request [means for sending]system that sends a connection request

packet [(Pc)]to the global IP address [(GB - GD)]in accordance with TPC/IP when the

global IP address [(GB - GD)] as the destination of the other IP connection terminal [(3B -

3D)]is sent back from the directory service server [(4)]in accordance with the demand for

the sending request packet[(Ps)].

6. (Amended) An IP connection terminal for establishing communication with

[other] another IP connection terminal [(3B - 3D)]assigned with a global IP address [(G_B -

G_D)]by a provider [(5B - 5D)]on every connection to an internet [(2)]in accordance with

TCP/IP, the terminal comprising[;]:

a calling code input [means (M_{21}) for inputting]system that inputs a calling code [(Y_B -

Y_D)]of the other IP connection terminal,

a destination address request [means (M_{22}) for sending]system that sends a sending

request packet [(Ps)]demanding [for the] notification of a global IP address [(G_B - G_D)

]corresponding to the calling code [(Y_B - Y_D)]inputted by the calling code input [means

(M_{21})]system to the directory service server[(4)], and

a connection request [means for sending]system that sends a connection request

packet [(Pc)]to the global IP address [(G_B - G_D)]in accordance with TPC/IP when the global

IP address [(G_B - G_D)]as the connection address of the other IP connection terminal [(3B -

3D)]is sent back from the directory service server [(4)]in accordance with the demand for

the sending request packet[(Ps)].

7. (Amended) An IP connection terminal assigned with a global IP address [(G$_A$ -

G$_D$)] by a provider [(5A - 5D)]on every connection to a internet [(2)]upon communication

by way of the internet [(2)]in accordance with TCP/IP, the terminal comprising:

a waiting registration request [means (M$_1$) for sending]system that sends a waiting

request packet [(Pw)]comprising a machine authentication data [(N$_A$ - N$_D$)]and a global IP

address [(G$_A$ - G$_D$)]assigned by a provider [(5A - 5D)]to a directory service server [(4)]in

which a calling code [(Y$_A$ - Y$_D$)]corresponding to the machine authentication data [(N$_A$ - N$_D$)

]is previously registered upon connection to the internet [(2)]and demanding [for] the

registration of the global IP address [(G$_A$ - G$_D$)]corresponding to the machine authentication

data [(N$_A$ - N$_D$)]and calling data [(Y$_A$ - Y$_D$)]as current connection address.

8. (Twice Amended) An IP connection terminal as defined in claim 5, wherein

a LAN card [(7)]connected in a wireless fashion to a wireless LAN access point [(6A

- 6D)]is connected to the internet[(2)],

[the] third layer data of the waiting request packet [Pw]and the sending request packet

[Ps]contains the customer identification data [(KID)]for specifying the user and a machine

identification data [(MID)]for specifying the IP connection terminal thereof as the machine

authentication data, [(NA - ND)] and the machine identification data [(MID)]contains an

[MAC]encrypted message access control address [DA]encrypted under a predetermined rule

from [MAC]a message access control address [(MD)]or the [MAC]message access control

address [(MD)]per se of the LAN card[(7)].

9. (Amended) An IP connection communication system as defined in claim 2,

wherein a third layer data of the waiting request packet [(Pw)]and the sending request packet

[(Ps)]contains a customer identification data [KID]for specifying a user and a machine

identification data [MID]for specifying the IP connection terminal [(3A - 3D)]thereof as the

machine authentication data [(NA - ND)], and

the waiting registration [means (M4)]system and the IP address notification [means

(M5)]system of the directory service server [(4)]are executed when the machine

authentication data [(NA - ND)]agrees with a previously registered user's machine

authentication data [(NA - ND)].

10. (Amended) An IP connection communication system as defined in claim 9,

wherein a LAN card [(7)]connected in a wireless fashion with each of wireless LAN access

points [6A to 6D] connected to the internet is attached to each IP connection terminal [(3A -3D)]and

[an MAC]a message access control address [(DM)]encrypted under a predetermined rule or the [MAC]message access control address [(DM)]per se of the LAN card [(7)]is contained in the machine identification data [(MID)].

11. (Amended) An IP connection terminal as defined in claim 6, wherein a LAN card [(7)]connected in a wireless fashion to a wireless LAN access point [(6A - 6D)] is connected to the internet[(2)],

[the] third layer data of the waiting request packet [Pw]and the sending request packet [Ps] contains the customer identification data [(KID)]for specifying the user and a machine identification data [(MID)]for specifying the IP connection terminal thereof as the machine authentication data, [(NA - ND)] and the machine identification data [(MID)]contains[an MAC] an encrypted message access control address [DA]encrypted under a predetermined rule from [MAC]a message access control address [(MD)]or the [MAC]message access control address [(MD)]per se of the LAN card[(7)].

12. (Amended) An IP connection terminal as defined in claim 7, wherein a LAN card [(7)]connected in a wireless <u>fashion</u> to a wireless LAN access point [(6A - 6D)]is connected to the internet[(2)],

[the] third layer data of the waiting request packet Pw and the sending request packet Ps contains the customer identification data [(KID)]for specifying the user and a machine identification data [(MID)]for specifying the IP connection terminal thereof as the machine authentication data, [(NA - ND)] and the machine identification data [(MID)]contains [an MAC]<u>an encrypted message access control</u> address [DA]encrypted under a predetermined rule from [MAC]<u>a message access control</u> address [(MD)]or the [MAC]<u>message access control address</u> [(MD)]per se of the LAN card[(7)].